Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claims 1-4 (canceled)

Claim 5 (previously presented): A production method of a micro-lens array substrate, comprising the steps of:

forming on an inorganic dielectric substrate a first micro-lens array with a plurality of lenses;

applying a photosensitive resin on the first micro-lens array;

patterning the photosensitive resin by irradiation of ultraviolet light or visible light; and

forming a second micro-lens array using the patterned photosensitive resin as a mask,

said step of patterning the photosensitive resin being a step of forming the photosensitive resin into a required shape by adjusting a distribution of exposure light in the photosensitive resin by use of a beam that has transmitted through the first micro-lens array.

Claim 6 (original): The production method of a micro-lens array substrate as set forth in claim 5, wherein:

a middle layer made of an inorganic dielectric material is formed on the first micro-lens array substrate, and

the photosensitive resin, which is formed on the middle layer, is patterned by irradiation of visible light or ultraviolet light through the first micro-lens array and the middle layer, so as to form the second micro-lens array.

Claim 7 (original): The production method of a micro-lens array substrate as set forth in claim 6, wherein the first micro-lens array is set to have a focal plane in the vicinity of the photosensitive resin formed on the middle layer.

Claim 8 (currently amended): The production method of a micro-lens array substrate as set forth in claim 6 or 7, wherein:

a negative resist layer is used as the photosensitive resin;

the negative resist layer is patterned by irradiation of the beam that has transmitted through the first micro-lens array; and

etching is carried out on the negative resist layer so as to transfer a patterned shape of the negative resist layer to the middle layer.

Claim 9 (original): The production method of a micro-lens array substrate as set forth in any one of claims 5 through 7, wherein:

the photosensitive resin formed on the inorganic dielectric substrate has a two-layer structure of a first photosensitive resin and a second photosensitive resin, and

said production method further comprises the steps of:

applying and curing a visible light curable resin or an ultraviolet curable resin as said first photosensitive resin on the inorganic dielectric substrate; and

applying a negative resist as the second photosensitive resin, and wherein:

the second photosensitive resin is patterned into the second micro-lens array; and

the second micro-lens array is etched to transfer the pattern of the second micro-lens array to the first micro-lens array.

Claim 10 (original): The production method of a micro-lens array substrate as set forth in any one of claims 5 through 7, wherein:

an ultraviolet curable resin is used as the photosensitive resin formed on the inorganic dielectric substrate, and

the second micro-lens array is formed by:

curing the ultraviolet curable resin by irradiation of the beam that has transmitted through the first micro-lens array, and

removing uncured portions of the ultraviolet curable resin with an organic solvent.

Claim 11 (previously presented): The production method of a micro-lens array substrate as set forth in any one of claims 5 through 7, wherein:

the first micro-lens array is irradiated with a parallel ray with a uniform intensity distribution; and

patterning of the second micro-lens array is carried out with the micro-lens array substrate tilted with respect to an optical axis of the parallel ray.

Claim 12 (previously presented): The production method of a micro-lens array substrate as set forth in any one of claims 5 through 7,

wherein patterning of the second micro-lens array is carried out using an irradiated light image formed by irradiating the first micro-lens array with irradiated light whose intensity distribution has been determined by a transmittance modulation mask whose transmittance is continuously modulated.

Claims 13-18 (canceled)

Claim 19 (currently amended): A production method of a micro-lens array substrate comprising the steps of:

forming a first micro-lens array having a plurality of lenses;

applying a photosensitive resin on the first micro-lens array;

patterning the photosensitive resin by irradiation of ultraviolet light or visible light;

forming a three-dimensional structure using the patterned photosensitive resin as a mask;

<u>forming on an inorganic dielectric substrate the first micro-lens array having the plurality of lenses;</u>

<u>pasting a middle substrate on the inorganic dielectric substrate with a predetermined resin in between;</u>

<u>polishing a surface of the middle substrate, opposite the inorganic dielectric substrate, so as to adjust a thickness of the middle substrate to a predetermined thickness; and</u>

<u>applying the photosensitive resin on the polished surface of the middle substrate, so as to form the three-dimensional structure,</u>

said step of patterning the photosensitive resin being a step of forming the photosensitive resin into a required shape by adjusting a distribution of exposure light in the photosensitive resin by use of a beam that has transmitted through the first micro-lens array.

Claim 20 (canceled)

Claim 21 (currently amended): The production method of a micro-lens array substrate as set forth in claim 19 ~~or 20~~, wherein the three-dimensional structure is a second micro-lens array.

Claim 22 (currently amended): The production method of a micro-lens array substrate as set forth in claim ~~20~~19, wherein a focal plane of the first micro-lens array is set in a vicinity of the photosensitive resin formed on the middle substrate.

Claim 23 (previously presented): The production method of a micro-lens array substrate as set forth in claim 21, wherein:

the photosensitive resin formed on the middle substrate has a two-layer structure of a first photosensitive resin and a second photosensitive resin; and

said production method further comprises the steps of:

applying and curing a visible light curable resin or a ultraviolet curable resin as the first photosensitive resin on the middle substrate; and

applying a negative resist as the second photosensitive resin, and wherein: the second photosensitive resin is patterned into the second micro-lens array; and

the second micro-lens array is etched to transfer the pattern of the second micro-lens array to the first photosensitive resin.

Claim 24 (previously presented): The production method of a micro-lens array substrate as set forth in claim 21, wherein:

an ultraviolet curable resin is used as the photosensitive resin on said middle substrate; and

the second micro-lens array is formed by:

curing the ultraviolet curable resin by irradiation of the beam that has transmitted through the first micro-lens array; and

removing uncured portions of the ultraviolet curable resin with an organic solvent.

Claim 25 (currently amended): A production method of a three-dimensional structure comprising the steps of:

applying a photosensitive resin on an optical member;

patterning the photosensitive resin by irradiation of visible light or ultraviolet light; and

forming a three-dimensional structure using the patterned photosensitive resin as a mask,

said step of patterning the photosensitive resin being a step of forming the photosensitive resin into a required shape by adjusting a distribution of exposure light in the photosensitive resin by use of a light beam that has transmitted through an optical element having condensing function, said optical element having condensing function is irradiated with a parallel ray having a uniform intensity distribution, and patterning of the three-dimensional structure is carried out by tilting the optical member with respect to an optical axis of the parallel ray.

Claim 26 (original): The production method of a three-dimensional structure as set forth in claim 25, wherein said optical element having condensing function is formed or fixed on said optical member.

Claim 27 (original): The production method of a three-dimensional structure as set forth in claim 25 or 26, wherein a plurality of said optical elements having condensing function are provided.

Claim 28 (canceled)

Claim 29 (currently amended): The production method of a three-dimensional structure as set forth in claim ~~28~~25, wherein the three-dimensional structure is patterned by:

adjusting a tilt angle of the optical member; and

adjusting intensity or irradiation time of the irradiated parallel light.

Claim 30 (currently amended): ~~The~~ A production method of a three-dimensional structure ~~as set forth in claims 25 or 26, wherein~~comprising the steps of:

applying a photosensitive resin on an optical member;

patterning the photosensitive resin by irradiation of visible light or ultraviolet light; and

forming a three-dimensional structure using the patterned photosensitive resin as a mask,

said step of patterning the photosensitive resin being a step of forming the photosensitive resin into a required shape by adjusting a distribution of exposure light in the photosensitive resin by use of a light beam that has transmitted through an optical element having condensing function, and

patterning of the three-dimensional structure is carried out using an irradiated light image formed by irradiation of the optical element having condensing function with irradiated light whose intensity distribution has been determined by a transmittance modulation mask whose transmittance is continuously modulated.